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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,662	04/03/2001	Robert E. Gleichauf	062891.0519	4019

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EXAMINER

JUNG, MIN

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/825,662

Applicant(s)

GLEICHAUF ET AL.

Examiner

Min Jung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-19-01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 2, it is not clear what is meant by “receiving packets encoding streaming data----”; it is not clear how the two verbs “receiving” and “encoding” are related in the context.

In claims 8, 15, and 20, there is similar indefiniteness as the one above addressed for claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3-5, 8, 10-12, 15-17, and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Almulhem et al., 6,587,431 (Almulhem).

Regarding claims 1, 8, 15, and 20, Almulhem discloses supertrunking scheme for packet switching. Almulhem specifically teaches a method for communicating packets to a remote device comprising: receiving packet data stream for delivery to a remote device , wherein each of the packets comprise a sequence number (IP packets with sequence numbers are received at the IPF 212, col. 6, lines 38-56); separating the packets into a plurality of streams corresponding to a plurality of paths to the remote device, wherein each of the streams comprises a subset of the packets (Almulhem show an example of sending packets with sequence numbers 1, 2, 3, 4, and 5 traversing physical links 226c, 226d, 226b, 226a, and 226d, respectively, col. 6, line 66 – col. 7, line 8); and communicating the streams using the corresponding paths (the corresponding packets are sent to the router 104). See Fig. 2, and col. 6, line 36 – col. 7, line 8. The limitation “to reduce susceptibility to a disturbance on one of the paths” does not further limit the claim, because it suggests intended result without specifically requiring a step to be performed in association with the intended result.

Regarding claims 3 and 10, Almulhem fails to specifically teach that the subset of the packets having no more than two consecutive sequence numbers. Almuheim’s

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example shows separating the packets one at a time rendering the subset a one rather than two. However, Almulhem's teaching still meets the requirement of the claim language because "one" falls in the description "no more than two".

Regarding claims 4, 11, 16, and 21, Almulhem teaches separating the packets by alternating between the paths to assign each subsequent packet to a different one of the paths. See col. 6, line 53 – col. 7, line 8.

Regarding claims 5, 12, 17, and 22, Almulhem further teaches determining a capacity for each of the paths; and separating the packets into the streams based on the capacities of the paths (Load balancing function implemented for maximum bandwidth utilization, col. 2, lines 11-20, col. 6, lines 48-52, col. 8, lines 33-44, and col. 10, lines 1-35).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Almulhem in view of Khotimsky et al. (Khotimsky).

Regarding claims 2 and 9, Almulhem fails to specifically teach that his scheme can be used for voice data. Khotimsky discloses a method of maintaining packet order in multipath transmission systems, Khotimsky's teaching is in the same general area of

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technology of transmitting packets by utilizing a plurality of path. Khotimsky specifically teaches the network in which his invention is utilized to include voice data in addition to data, text, video, and other types of data. As suggested by Khotimsky, today's packet network generally embraces voice communication as is apparent by the IP telephony (voice over IP) being widely used. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement the packet communication method of Almulhem by adopting voice packet as an input to embrace voice as one type of data.

***Allowable Subject Matter***

7. Claims 6, 7, 13, 14, 18, 19, 23, and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127.

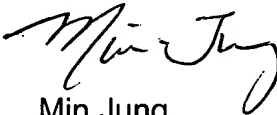
The examiner can normally be reached on Monday, Tuesday, and Thursday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ  
September 30, 2004

  
Min Jung  
Primary Examiner